THAT WHICH IS CLAIMED:

1.   A method for providing a cost quote for a complex model data analysis, the analysis being performed on a computer device being remotely disposed with respect to a computer terminal adapted to be used by a user, said method comprising:

prompting the user at the remote computer terminal to select an input data and an
5   analysis parameter for an analysis of the data input according to a complex model;

executing an automated cost calculator function in response to the selected input data and analysis parameter, the cost calculator function being particularly configured with respect to the complex model so as to provide a cost quote
10   for execution of the corresponding analysis by the computer device; and

providing the cost quote to the user at the remote computer terminal, the user thereafter being capable of modifying the input data and the analysis parameter and resubmitting the modified input data and analysis parameter so as to obtain a corresponding revised cost quote for the respective
15   analysis.

2.   A method according to Claim 1 further comprising executing the analysis according to the complex model for the selected input data and analysis parameter at the computer device after executing the automated cost calculator function.
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3.   A method according to Claim 2 further comprising providing a result of the analysis and a billing corresponding to the cost quote to the user after executing the analysis according to the complex model.

25   4.   A method according to Claim 3 further comprising providing at least one of the result of the analysis and the billing corresponding to the cost quote to the user at the remote computer terminal.

5.   A method according to Claim 1 further comprising establishing an account for the user prior to prompting the user to select an input data and an analysis parameter.

6.   A method according to Claim 2 further comprising retrieving the selected input data and analysis parameter from a database prior to executing the analysis according to the complex model.

7.   A method according to Claim 3 further comprising storing at least one of the result of the analysis and the billing corresponding to the cost quote in a database after executing the analysis according to the complex model.

8.   A method according to Claim 5 further comprising storing at least one of the selected input data, the selected analysis parameter, the result of the analysis, and the billing corresponding to the cost quote in a database according to the account for the user.

9.   A method according to Claim 1 wherein prompting the user to select an input data further comprises prompting the user to select an input data for a complex environmental model, the input data comprising at least one of a date span, a grid, an area source, a point source, a biogenics source, a mobile source, an all merge option, a meteorology option, and a maximum number of emission layers for the meteorology option.

10.   A method according to Claim 1 wherein prompting the user to select an analysis parameter further comprises prompting the user to select an analysis parameter for a complex environmental model, the analysis parameter comprising at least one of a modeling type, a particular model within the modeling type, and a speciation of the particular model.

11.   A method according to Claim 10 wherein prompting the user to select an analysis parameter for a complex environmental model further comprises prompting the

user to select a modeling type comprising at least one of a global modeling type and a regional/urban modeling type.

12.   A method according to Claim 11 wherein prompting the user to select an analysis parameter for a complex environmental model further comprises prompting the user to select a modeling type comprising at least one of a Global Balance Environment (GLOBE) global modeling type and a Sparse Matrix Operator Kernel Emissions (SMOKE) regional/urban modeling type.

13.   A method according to Claim 12 wherein prompting the user to select an analysis parameter for a complex environmental model further comprises prompting the user to select a particular model within the SMOKE regional/urban modeling type, the particular model comprising at least one of a Community Multiscale Air Quality (CMAQ) model, an Urban Airshed Model – Variable Grid (UAM-V) model, a Comprehensive Air Quality Model with Extensions (CAMx) model, a Multiscale Air Quality Simulation Platform (MAQSIP) model, a Regulatory Modeling System for Aerosols and Deposition (REMSAD) model, an Urban Airshed Model – Aerosol (UAM-AERO) model, and an Urban Airshed Model – Version 4 (UAM-IV) model.

14.   A method for complex model data analysis, the analysis being performed on a computer device being remotely disposed with respect to a computer terminal adapted to be used by a user, said method comprising:

prompting the user at the remote computer terminal to select an input data and an analysis parameter for an analysis of the input data according to a complex model;

executing an automated cost calculator function in response to the selected input data and analysis parameter, the cost calculator function being particularly configured with respect to the complex model so as to provide a cost quote for execution of the corresponding analysis by the computer device;

executing the analysis according to the complex model for the selected input data and analysis parameter at the computer device so as to determine a result; and

providing the result of the analysis and a billing corresponding to the cost quote to the user.

15. A method according to Claim 14 further comprising establishing an account for the user prior to prompting the user to select an input data and an analysis parameter.

16. A method according to Claim 15 further comprising storing at least one of the selected input data, the selected analysis parameter, the result of the analysis, and the billing corresponding to the cost quote in a database according to the account for the user.

17. A method according to Claim 14 further comprising providing the cost quote to the user at the remote computer terminal, the user thereafter being capable of modifying the input data and the analysis parameter and resubmitting the modified input data and analysis parameter so as to obtain a corresponding revised cost quote for the respective analysis.

18. A method according to Claim 14 further comprising retrieving the selected input data and analysis parameter from a database prior to executing the analysis according to the complex model.

19. A method according to Claim 14 wherein prompting the user to select an input data further comprises prompting the user to select an input data for a complex environmental model, the input data comprising at least one of a date span, a grid, an area source, a point source, a biogenics source, a mobile source, an all merge option, a meteorology option, and a maximum number of emission layers for the meteorology option.

20. A method according to Claim 14 wherein prompting the user to select an analysis parameter further comprises prompting the user to select an analysis parameter for a complex environmental model, the analysis parameter comprising at least one of a modeling type, a particular model within the modeling type, and a speciation of the

5   particular model.

21. A method according to Claim 20 wherein prompting the user to select an analysis parameter for a complex environmental model further comprises prompting the user to select a modeling type comprising at least one of a global modeling type and a

10   regional/urban modeling type.

22. A method according to Claim 21 wherein prompting the user to select an analysis parameter for a complex environmental model further comprises prompting the user to select a modeling type comprising at least one of a Global Balance Environment

15   (GLOBE) global modeling type and a Sparse Matrix Operator Kernel Emissions (SMOKE) regional/urban modeling type.

23. A method according to Claim 22 wherein prompting the user to select an analysis parameter for a complex environmental model further comprises prompting the

20   user to select a particular model within the SMOKE regional/urban modeling type, the particular model comprising at least one of a Community Multiscale Air Quality (CMAQ) model, an Urban Airshed Model – Variable Grid (UAM-V) model, a Comprehensive Air Quality Model with Extensions (CAMx) model, a Multiscale Air Quality Simulation Platform (MAQSIP) model, a Regulatory Modeling System for

25   Aerosols and Deposition (REMSAD) model, an Urban Airshed Model – Aerosol (UAM-AERO) model, and an Urban Airshed Model – Version 4 (UAM-IV) model.

24. A method according to Claim 14 further comprising providing at least one of the result of the analysis and the billing corresponding to the cost quote to the user at

30   the remote computer terminal.

25.   A computer software program product being executable on a computer device and being capable of performing a complex model data analysis, the computer device being remotely disposed with respect to a computer terminal adapted for use by a user, said computer software program product comprising:

an executable portion capable of prompting the user at the remote computer terminal to select an input data and an analysis parameter for an analysis of the input data according to a complex model;

an executable portion capable of executing an automated cost calculator function in response to the selected input data and analysis parameter, the executable portion for the cost calculator function being particularly configured with respect to the complex model so as to provide a cost quote for execution of the corresponding analysis by the computer device;

an executable portion capable of executing the analysis, according to the complex model for the selected input data and analysis parameter, at the computer device so as to determine a result; and

an executable portion capable of directing provision of the result of the analysis and a billing corresponding to the cost quote to the user.

26.   A computer software program product according to Claim 25 further comprising an executable portion capable of establishing an account for the user.

27.   A computer software program product according to Claim 26 further comprising an executable portion capable of directing the storage of at least one of the input data, the analysis parameter, the result of the analysis, and the billing corresponding to the cost quote in a database according to the account for the user.

28.   A computer software program product according to Claim 25 further comprising an executable portion capable of directing the provision of the cost quote to the user at the remote computer terminal.

29.   A computer software program product according to Claim 28 further comprising an executable portion capable of permitting the user to modify the input data and the analysis parameter and resubmitting the modified input data and analysis parameter so as to obtain a corresponding revised cost quote for the respective analysis.

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30.   A computer software program product according to Claim 25 further comprising an executable portion capable of retrieving the selected input data and analysis parameter from a database prior to executing the analysis according to the complex model.

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31.   A computer software program product according to Claim 25 wherein the executable portion capable of prompting the user to select an input data is further capable of prompting the user to select an input data for a complex environmental model, the input data comprising at least one of a date span, a grid, an area source, a point source, a biogenics source, a mobile source, an all merge option, a meteorology option, and a maximum number of emission layers for the meteorology option.

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32.   A computer software program product according to Claim 25 wherein the executable portion capable of prompting the user to select an analysis parameter is further capable of prompting the user to select an analysis parameter for a complex environmental model, the analysis parameter comprising at least one of a modeling type, a particular model within the modeling type, and a speciation of the particular model.

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33.   A computer software program product according to Claim 32 wherein the executable portion capable of prompting the user to select an analysis parameter for a complex environmental model is further capable of prompting the user to select a modeling type comprising at least one of a global modeling type and a regional/urban modeling type.

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34.   A computer software program product according to Claim 33 wherein the executable portion capable of prompting the user to select an analysis parameter for a

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complex environmental model is further capable of prompting the user to select a modeling type comprising at least one of a Global Balance Environment (GLOBE) global modeling type and a Sparse Matrix Operator Kernel Emissions (SMOKE) regional/urban modeling type.

35.   A computer software program product according to Claim 34 wherein the executable portion capable of prompting the user to select an analysis parameter for a complex environmental model is further capable of prompting the user to select a particular model within the SMOKE regional/urban modeling type, the particular model comprising at least one of a Community Multiscale Air Quality (CMAQ) model, an Urban Airshed Model – Variable Grid (UAM-V) model, a Comprehensive Air Quality Model with Extensions (CAMx) model, a Multiscale Air Quality Simulation Platform (MAQSIP) model, a Regulatory Modeling System for Aerosols and Deposition (REMSAD) model, an Urban Airshed Model – Aerosol (UAM-AERO) model, and an Urban Airshed Model – Version 4 (UAM-IV) model.

36.   A computer software program product according to Claim 25 wherein the executable portion capable of directing provision of the result of the analysis and the billing corresponding to the cost quote to the user is further capable of directing provision of at least one of the result of the analysis and the billing corresponding to the cost quote to the user at the remote computer terminal.

37.   A computer device configured to perform a complex model data analysis, the computer device being remotely disposed with respect to a computer terminal adapted for use by a user, said computer device comprising:

   a processing portion configured to prompt the user at the remote computer
       terminal to select an input data and an analysis parameter for an analysis
       of the input data according to a complex model;

   a processing portion configured to execute an automated cost calculator function
       at the remote computer device in response to the selected input data and
       analysis parameter, the executable portion for the cost calculator function

being particularly configured with respect to the complex model so as to

provide a cost quote for execution of the corresponding analysis by the

computer device;

a processing portion configured to execute the analysis, according to the complex

model for the selected input data and analysis parameter, at the computer

device so as to determine a result; and

a processing portion configured to direct provision of the result of the analysis

and a billing corresponding to the cost quote to the user.

38.   A computer device according to Claim 37 further comprising a processing

portion configured to establish an account for the user.

39.   A computer device according to Claim 38 further comprising a processing

portion configured to store at least one of the input data, the analysis parameter, the result

of the analysis, and the billing corresponding to the cost quote in a database according to

the user account.

40.   A computer device according to Claim 37 further comprising a processing

portion configured to provide the cost quote to the user at the remote computer terminal.

41.   A computer device according to Claim 40 further comprising a processing

portion configured to permit the user to modify the input data and the analysis parameter

and to resubmit the modified input data and analysis parameter so as to obtain a

corresponding revised cost quote for the respective analysis.

42.   A computer device according to Claim 37 further comprising a processing

portion configured to retrieve the selected input data and analysis parameter from a

database prior to actuation of the processing portion for executing the analysis according

to the complex model.

43.   A computer device according to Claim 37 wherein the processing portion configured to prompt the user to select an input data is further configured to prompt the user to select an input data for a complex environmental model, the input data comprising at least one of a date span, a grid, an area source, a point source, a biogenics source, a

5   mobile source, an all merge option, a meteorology option, and a maximum number of emission layers for the meteorology option.

44.   A computer device according to Claim 37 wherein the processing portion configured to prompt the user to select an analysis parameter is further configured to

10   prompt the user to select an analysis parameter for a complex environmental model, the analysis parameter comprising at least one of a modeling type, a particular model within the modeling type, and a speciation of the particular model.

45.   A computer device according to Claim 44 wherein the processing portion

15   configured to prompt the user to select an analysis parameter for a complex environmental model is further configured to prompt the user to select a modeling type comprising at least one of a global modeling type and a regional/urban modeling type.

46.   A computer device according to Claim 45 wherein the processing portion

20   configured to prompt the user to select an analysis parameter for a complex environmental model is further configured to prompt the user to select a modeling type comprising at least one of a Global Balance Environment (GLOBE) global modeling type and a Sparse Matrix Operator Kernel Emissions (SMOKE) regional/urban modeling type.

25   47.   A computer device according to Claim 46 wherein the processing portion configured to prompt the user to select an analysis parameter for a complex environmental model is further configured to prompt the user to select a particular model within the SMOKE regional/urban modeling type, the particular model comprising at least one of a Community Multiscale Air Quality (CMAQ) model, an Urban Airshed

30   Model – Variable Grid (UAM-V) model, a Comprehensive Air Quality Model with Extensions (CAMx) model, a Multiscale Air Quality Simulation Platform (MAQSIP)

model, a Regulatory Modeling System for Aerosols and Deposition (REMSAD) model, an Urban Airshed Model – Aerosol (UAM-AERO) model, and an Urban Airshed Model – Version 4 (UAM-IV) model.

5   48.   A computer device according to Claim 37 wherein the processing portion configured to direct provision of the result of the analysis and the billing corresponding to the cost quote to the user is further configured to direct provision of at least one of the result of the analysis and the billing corresponding to the cost quote to the user at the remote computer terminal.

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49.   A system adapted for use by a user over a network and configured to perform a complex model data analysis at a computer device remotely disposed with respect to the user, said system comprising:

a data generation module configured to prompt the user to select an input data and

15   an analysis parameter for an analysis of the input data according to a

complex model;

a cost calculator module in communication with the data generation module and

particularly configured with respect to the complex model so as to provide

a cost quote to the user for execution of the corresponding analysis;

20   a model execution module configured to execute the analysis according to the

complex model for the selected input data and analysis parameter so as to

determine a result; and

a server module configured to communicate the selected input data and analysis

parameter between the data generation module and the model execution

25   module, the server module being further configured to direct provision of

the result of the analysis to the user after being notified of completion of

the analysis by the model execution module and to direct provision of a

billing to the user corresponding to the cost quote provided by the cost

calculator module.

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50.   A system according to Claim 49 further comprising a user/account management module in communication with the server module and the data generation module and configured to establish an account for the user so as to control interaction of the user with the data generation module.

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51.   A system according to Claim 50 further comprising a database module in communication with the data generation module, the user/account management module, and the model execution module and configured to store and manage data associated with the user and the complex model.

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52.   A system according to Claim 51 wherein the model execution module is configured to modify the data in the database module, according to the result of the analysis, upon completion of the analysis.

15   53.   A system according to Claim 50 wherein the user/account management module is further configured to control the execution of the analysis by the model execution module according to the account for the user.

54.   A system according to Claim 50 further comprising a database module in 20   communication with the data generation module, the user/account management module, and the model execution module and configured to store at least one of the input data, the analysis parameter, the result of the analysis, and the billing corresponding to the cost quote in a database according to the user account.

25   55.   A system according to Claim 49 wherein the server module is further configured to direct provision of at least one of the cost quote, the result of the analysis, and the billing corresponding to the cost quote to the user at the remote computer terminal.

30   56.   A system according to Claim 55 wherein at least one of the data generation module, the cost calculator module, and the server module is configured to

permit the user to modify the input data and the analysis parameter and to resubmit the modified input data and analysis parameter to the cost calculator module so as to obtain a corresponding revised cost quote for the respective analysis.

57.   A system according to Claim 49 wherein the data generation module is further configured to retrieve the selected input data and analysis parameter from a database module prior to model execution module executing the analysis according to the complex model.

58.   A system according to Claim 49 wherein the data generation module is further configured to prompt the user to select an input data for a complex environmental model, the input data comprising at least one of a date span, a grid, an area source, a point source, a biogenics source, a mobile source, an all merge option, a meteorology option, and a maximum number of emission layers for the meteorology option.

59.   A system according to Claim 49 wherein the data generation module is further configured to prompt the user to select an analysis parameter for a complex environmental model, the analysis parameter comprising at least one of a modeling type, a particular model within the modeling type, and a speciation of the particular model.

60.   A system according to Claim 59 wherein the data generation module is further configured to prompt the user to select a modeling type comprising at least one of a global modeling type and a regional/urban modeling type.

61.   A system according to Claim 60 wherein the data generation module is further configured to prompt the user to select a modeling type comprising at least one of a Global Balance Environment (GLOBE) global modeling type and a Sparse Matrix Operator Kernel Emissions (SMOKE) regional/urban modeling type.

62.   A system according to Claim 61 wherein the data generation module is further configured to prompt the user to select a particular model within the SMOKE

regional/urban modeling type, the particular model comprising at least one of a Community Multiscale Air Quality (CMAQ) model, an Urban Airshed Model – Variable Grid (UAM-V) model, a Comprehensive Air Quality Model with Extensions (CAMx) model, a Multiscale Air Quality Simulation Platform (MAQSIP) model, a Regulatory Modeling System for Aerosols and Deposition (REMSAD) model, an Urban Airshed Model – Aerosol (UAM-AERO) model, and an Urban Airshed Model – Version 4 (UAM-IV) model.